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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,892	12/21/2001	Steven Gerard Mayorga	06223 USA	5094

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AIR PRODUCTS AND CHEMICALS, INC.
PATENT DEPARTMENT
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EXAMINER

MOORE, MARGARET G

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 03/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,892	Applicant(s) MAYORGA ET AL.	
	Examiner Margaret G. Moore	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1 to 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 15, 17, 20, 22, 23, 25 to 30 is/are allowed.
- 6) ☐ Claim(s) 1 to 3, 8 to 10, 16, 18, 19, 21, 24 is/are rejected.
- 7) ☐ Claim(s) 4 to 7, 11 to 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> | 6) <input type="checkbox"/> Other: |

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1. Claims 3, 10, 16, 21 and 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner cannot find support for the limitation "less than 1% (vol.)" in the specification. As such this limitation does not appear to be enabled by the specification.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 8, 9, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 07-145179 (English language translation, herein '179).

JP '179 teaches stabilizing tetramethylcyclotetrasiloxane by adding thereto a chain polymethylpolysiloxane. This anticipates claim 1. This siloxane inherently meets the pKa limitation of claim 2. Note, for instance, that applicants disclose this siloxane as an operable polymerization inhibitor. The stabilized composition meets the requirements of claims 18 and 19.

5. Claims 3, 10, 21 and 24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP '179.

In paragraph 11 on page 2 of the English language translation of JP '179, it is

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noted that the stabilizing effect on the cyclopolsiloxane when adding less than 1% of the chain siloxane decreases. This anticipates the requirement of less than 1% siloxane since patentees clearly have prepared such a composition. A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. In this manner the prior art anticipates the instant claims.

On the other hand, one having ordinary skill in the art would have found it obvious to use less than 1% of the chain siloxane to stabilize the cyclosiloxane in '179 since the reference does teach that stabilization occurs, albeit to a lesser extent. Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. The difference between the preferred lower limit of 1% and the claimed upper limit of less than 1% is extremely slight and one having ordinary skill in the art would have expected such compositions to have the same properties. In this manner, these claims are rendered obvious by the prior art.

6. Claims 4 to 7 and 11 to 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to provide adequate motivation to add a free radical scavenger to the composition in '179.

7. Claims 15, 17, 20, 22, 23 and 25 to 30 are allowed. The prior art fails to teach or suggest stabilizing cyclosiloxanes with the polymerization inhibitors as claimed and fails to teach or suggest the addition of a free radical scavenger to a stabilized cyclosiloxane. The Examiner notes that claim 15 is limited by the requirement that the cyclosiloxane be stabilized and be able to be used in a chemical vapor deposition process, and as such it is not open to just any process of combining the tetramethylcyclotetrasiloxane

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and a neutral to weakly acidic polymerization inhibitor. Similarly the compositions claimed need to be stabilized and able to be used in a chemical vapor deposition process.

8. Perry et al. is cited as being of general interest. This reference teaches stabilizing cyclic siloxanes but fails to teach or suggest stabilizing a cyclotetrasiloxane required by the instant claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 703-308-4334. The examiner can normally be reached on Mon., Wed., Thurs. and Friday, 10am to 4pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9311 for regular communications and 703-872-9310 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
March 12, 2003